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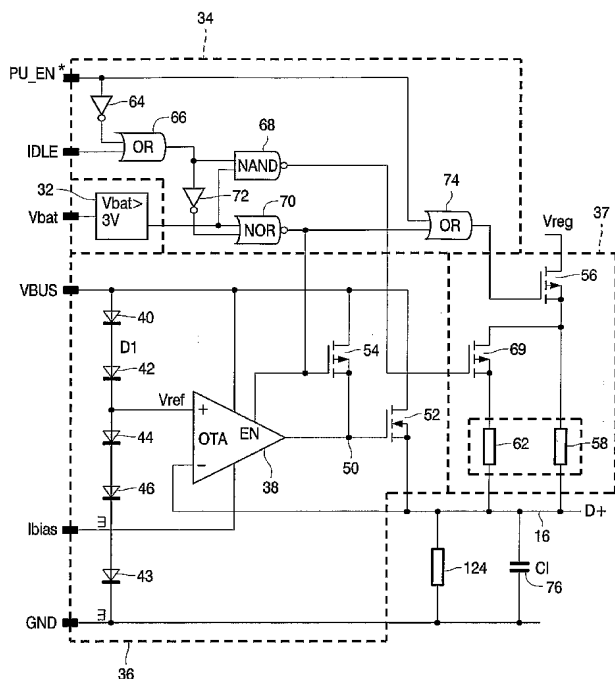
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[Continued on next page]

**(54) Title:** PULL-UP CIRCUIT



**(57) Abstract:** A pull-up circuit comprises an operational amplifier which forms part of a feedback circuit, acting to bring a pull-up circuit output equal to a reference voltage input. The pull-up circuit may form part of a USB transceiver for incorporation in a USB Device. When the supply voltage of the USB Device is sufficiently high, it is used to provide the required pull-up voltage, with the feedback circuit including the operational amplifier being enabled only when the supply voltage of the USB Device is not high enough to provide the required pull-up voltage. In that case, the USB bus voltage is used to generate the reference voltage which is used as an input to the feedback circuit.



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